

What is claimed:

1. A process for treating a textile fabric to impart or enhance at least one property of the fabric comprising:

introducing the fabric into an aqueous formaldehyde containing solution to provide a wet pickup of an effective amount of the solution by the fabric, applying to the fabric an effective amount of a catalyst for catalyzing a reaction between formaldehyde and the fabric;

thereafter exposing the wet fabric to a temperature of at least about 300°F to react the formaldehyde with the fabric to impart or enhance the property of the fabric before there is a substantial loss of formaldehyde from the exposed fabric.

2. A process for treating a textile fabric to enhance at least one property of the fabric comprising:

treating the fabric at ambient temperature with an aqueous formaldehyde solution and catalyst for catalyzing the reaction between formaldehyde and the fabric;

introducing said fabric into a heating zone having an elevated temperature of at least about 300°F to subject the ambient temperature-treated fabric directly to the elevated temperature for reaction of the formaldehyde with the fabric to enhance the property of the fabric.

3. A process for treating a textile fabric with formaldehyde to enhance at least one property of the fabric comprising

treating a fabric containing fibers selected from the group consisting of cellulosic fibers and protein fibers with formaldehyde to react with said cellulosic or protein fibers, and

grafting an elastomer onto said cellulosic or protein fibers.

4. The process of claim 1 which is a continuous process for treating the textile fabric comprising;

continuously introducing the fabric into an aqueous solution to provide a wet pickup of an effective amount of the solution by the fabric, wherein the solution comprises an effective amount of formaldehyde and a catalyst for catalyzing a reaction between formaldehyde and the fabric;

thereafter continuously exposing the wet fabric to a temperature of at least about 300°F to react the formaldehyde with the fabric to impart or enhance the property of the fabric, before there is a substantial loss of formaldehyde from the exposed fabric.

5. The process of claim 4, wherein the textile fabric contains natural fibers which are cellulosic or protein fibers.

6. The process of claim 4, wherein the fibers are cotton fibers.

7. The process of claim 4, wherein the fibers are rayon fibers and the treatment controls shrinkage.

8. The process of claim 5, wherein the natural fibers are protein fibers which are wool or silk fibers.

9. The process of claim 1, wherein an aqueous containing solution of urea or a derivative thereof is applied to the fabric.

10. The process of claim 5, wherein an effective amount of an elastomer is applied to the fabric before the formaldehyde reacts with the fabric to enhance the property of the fabric.

11. The process of claim 10, wherein the elastomer is a reactive elastomer.

12. The process of claim 11, wherein the fabric remains hydrophilic after treatment.

13. The process of claim 10, wherein the elastomer is a film forming silicone elastomer.

14. The process of claim 1, wherein the wet pickup of the solution on the fabric is at least about 20% by weight of the fabric.

15. The process of claim 14, wherein the wet pickup is at least about 30%.

16. The process of claim 15, wherein the wet pickup is from 30 to 60%.

17. The process of claim 1, wherein the fabric is exposed to the temperature of at least about 300°F by plunging the fabric into a heating chamber heated to a temperature of from about 300°F to about 350°F.

18. The process of claim 1, wherein the fabric is moistened with an aqueous solution prior to application of the aqueous formaldehyde solution.

19. A hydrophilic durable press fiber containing fabric having formaldehyde crosslinks and elastomer grafts.

20. The fabric of claim 19, wherein the grafts are silicone elastomer grafts and the fabric is cellulosic containing.

A:\PAYAPPLN.cip19.wpd